Developing Remote Sensing Protocols for Inventory of Permanent Vegetative Practices

**Issue:** An accurate inventory of in-field and off-site nutrient management practices is essential to establish baseline conditions and document implementation of the Iowa Nutrient Reduction Strategy.

**Objective:** This project will develop remote sensing protocols for the inventory and monitoring of two permanent vegetative conservation practices — riparian buffers and grassed waterways.

**Approach:** These protocols will be evaluated in at least three of the initial eight Iowa Water Quality Initiative projects, and more may be added if time permits. To create the baseline conservation practice geodatabase, geographic information systems (GIS) staff will use the Iowa Department of Natural Resources high-resolution land cover product to identify the base conditions for permanent vegetation in the watershed projects. To update the conservation practice geodatabase, newly established practices will be identified. To apply the conservation practice geodatabase, the quality of established practices and potential for new sites will be tested and evaluated. Existing sites will be evaluated for potential effectiveness as nutrient reduction practices.

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